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Please find below and/or attached an Office communication concerning this application or proceeding.

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Application/Control Number: 09/813,112

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NOTE:

This edited Examiner's Answer contains amended section **(8) Evidence Relied Upon**. In the original Examiner's Answer, this section read, "No evidence is relied upon by the examiner in the rejection of the claims under appeal." Obviously, because the examiner rejected all pending claims under either 35 U.S.C. 102 or 35 U.S.C. 103, this statement is inaccurate.

The examiner notes that the inaccurate statement had no effect on Appellant's response to the original Examiner's Answer, as indicated by the fact that Appellant has already submitted a Reply Brief (see *Reply Brief* dated 01/24/2007). The examiner also notes that the USPTO has chosen to require that the examiner amend the inaccurate statement to identify the prior art relied upon in the claim rejections and mail the edited Examiner's Answer to the Appellant.

The examiner will do so.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/813,112
Filing Date: March 21, 2001
Appellants: ERICSON ET AL.

MAILED

MAY 11 2007

Technology Center 2100

Michael K. Mutter, Reg. No. 29,680

For Appellant

EXAMINER'S ANSWER

This is in response to the Appeal Brief filed 09/05/2006 appealing from the Office Action mailed 01/04/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The Appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

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(6) *Grounds of Rejection to be Reviewed on Appeal*

The Appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) *Claims Appendix*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) *Evidence Relied Upon*

US 5,652,412	Lazzouni et al.	07-1997
US 5,897,648	Henderson	04-1999
US 6,661,920	Skinner	12-2003
US 6,752,317	Dymetman et al.	06-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-12, 15, 16, 22, 23 and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Lazzouni et al., U.S. Patent No. 5,652,412.

Claim 1:

Lazzouni discloses:

<i>a method of editing a document, comprising:</i>	The information recording system in Lazzouni allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory (see Column 1, Lines 6-8; see Column 2, Lines 28-31)
<i>transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern,</i>	The information recording system includes paper encoded with pixel patterns (i.e., position-coding patterns). The encoded paper is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a <i>form</i> " (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33. In order to have "forms" in a "sales book," the forms must be printed by a "printing device," and the "document information" comprising the "forms" must be "transferred" to the "printing device." (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)
<i>the position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions of the surface,</i>	The pixel patterns comprise pixels (i.e., symbols), which contain encoded position information in the form of coordinates of an X-Y grid and define a plurality of coordinate positions on the paper. (see Figures 12 and 13; see Column 6, Lines 35-44; see Column 6, Lines 61-63)

<i>each position being coded by a plurality of the symbols,</i>	The information recording system uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
<i>wherein each symbol contributes to the coding of more than one of the plurality of positions;</i>	The information recording system uses a plurality of pixels to determine the coordinates of the positions of the pen as it is moved over the pixel paper by the user. Thus, each pixel is used to code multiple positions of the pen. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
<i>receiving editing information from a reading device adapted to read position information from the position-coded surface;</i>	The information recording system includes a pen and a recording apparatus. The pen allows the user to write (i.e., input editing information) on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)

<i>interpreting the editing information; and</i>	The information recording system includes the pen and the recording apparatus, wherein the recording apparatus includes components (see Figure 7) that "decode," "synthesize" and "compress" the data received from the pen, as indicated in Column 8, Line 65 through Column 9, Line 13. By performing this processing on the handwritten data, the system "interprets" the data. The data is then stored in a microprocessor. (see Figure 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13)
<i>changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document.</i>	The information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting (i.e., document information), as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)

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*Claim 6:**Lazzouni discloses the method according to Claim 1,*

<i>wherein the editing information includes position information related to a position of the reading device on the surface, and</i>	The pen allows the user to write on the encoded paper. As the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixel pattern, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)
<i>wherein the interpretation of the editing information includes interpretation of the position information.</i>	The recording apparatus includes components (see Figure 7) that "decode," "synthesize" and "compress" the data received from the pen, as indicated in Column 8, Line 65 through Column 9, Line 13. The data is then stored in a microprocessor. (see Figure 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13)

Claim 7:

Lazzouni discloses *the method according to Claim 6,*

<i>wherein the position information is in the form of sequences of coordinates forming manually generated curves corresponding in form to drawn curves on the printed document.</i>	The pen and the recording apparatus detect and record the pen locations as the user edits the document. As the user edits the document, the user forms "manually generated curves" in that the user's handwriting includes curved lines. The "sequences of coordinates" of the user's handwriting are detected and recorded by the pen and the recording apparatus as the user edits the document. (see Figures 1-3 and 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45; see Column 8, Line 65 through Column 9, Line 13)
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Claim 8:

Lazzouni discloses *the method according to Claim 1, further comprising*

<i>displaying the document information of the updated document to a user.</i>	The information recording system provides both a hardcopy and a digital copy of the edited form, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)
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Claim 9:

Lazzouni discloses *the method according to Claim 1,*

<i>wherein the step of changing the document information includes adding editing information in the form of handwritten annotations to the document.</i>	The information recording system in allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory (see Column 1, Lines 6-8; see Column 2, Lines 28-31)
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Claim 10:

Lazzouni discloses *the method according to Claim 9, further comprising*

<i>associating, based on position information included in the editing information, each of the handwritten annotations with a respective portion of the document information.</i>	The components within the pen (see Figure 3) read the pixel pattern on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels as the user writes on the encoded paper. Thereafter, the information recording system provides both a hardcopy and a digital copy of the edited form and the user's handwritten annotations, as indicated in Column 14, Lines 22-33. Thus, the user's annotations are "associated with a respective portion of the document information." (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45; see Column 9, Line 25-27; see Column 14, Lines 22-33)
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Claim 11:

Lazzouni discloses *the method according to Claim 1,*

<i>wherein changing the document information includes reformatting one or more parts of the document information.</i>	The information recording system incorporates the user's handwriting into the form and provides both a hardcopy and a digital copy of the form and the user's handwriting, as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)
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Claim 12:

Lazzouni discloses *the method according to Claim 11, wherein said reformatting is chosen from the group of:*

<i>adding text or graphics to said document information; removing text or graphics from said document information; or repositioning text or graphics included in said document information</i>	The information recording system incorporates the user's handwriting into the form and provides both a hardcopy and a digital copy of the form and the user's handwriting, as indicated in Column 14, Lines 22-33. By incorporating the user's handwriting into the form, the system "adds text to the document information." The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)
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Claim 15:

Claim 15 merely recites computer software that performs the method of Claim 1. The system disclosed in Lazzouni operates via software on a computer. Accordingly, Lazzouni discloses every limitation of Claim 15, as specified in the above rejection for Claim 1.

Claim 16:

Lazzouni discloses:

<i>a system for document editing, comprising:</i>	The computerized information recording system in Lazzouni allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory (see Column 1, Lines 6-8; see Column 2, Lines 28-31)
<i>storage means for storing a document;</i>	Lazzouni discloses that many prior art devices are used to edit documents stored in a computerized "storage means." Additionally, the computerized system comprises a host computer that stores all documents manipulated within the system. Finally, the computerized recording apparatus of the system comprises a storage means for storing the user's handwritten edits to the form. (see Column 1, Line 11 through Column 2, Line 17; see Column 9, Lines 14-38)

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<i>means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern,</i>	The computerized information recording system includes paper encoded with pixel patterns (i.e., position-coding patterns). The encoded paper is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a form " (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33. In order to have "forms" in a "sales book," the forms must be printed by a "printing device," and the "document information" comprising the "forms" must be "transferred" to the "printing device." (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)
<i>the position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions of the surface,</i>	The pixel patterns comprise pixels (i.e., symbols), which contain encoded position information in the form of coordinates of an X-Y grid and define a plurality of coordinate positions on the paper. (see Figures 12 and 13; see Column 6, Lines 35-44; see Column 6, Lines 61-63)
<i>each position being coded by a plurality of the symbols,</i>	The computerized information recording system uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)

<i>wherein each symbol contributes to the coding of more than one of the plurality of positions;</i>	The information recording system uses a plurality of pixels to determine the coordinates of the positions of the pen as it is moved over the pixel paper by the user. Thus, each pixel is used to code multiple positions of the pen. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
<i>means for receiving editing information from a reading device adapted to read position information from a position-coded surface;</i>	The information recording system includes a pen and a recording apparatus. The pen allows the user to write (i.e., input editing information) on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)
<i>means for interpreting the editing information; and</i>	The computerized information recording system includes the pen and the recording apparatus, wherein the recording apparatus includes components (see Figure 7) that "decode," "synthesize" and "compress" the data received from the pen, as indicated in Column 8, Line 65 through Column 9, Line 13. By performing this processing on the handwritten data, the system "interprets" the data. The data is then stored in a microprocessor. (see Figure 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13)

<i>means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.</i>	The computerized information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting (i.e., document information), as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)
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Claim 22:

Lazzouni discloses:

<i>a method of editing a document containing information, comprising:</i>	The information recording system in Lazzouni allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory (see Column 1, Lines 6-8; see Column 2, Lines 28-31)
<i>storing the document information in memory;</i>	Lazzouni discloses that many prior art devices are used to edit documents stored in a computerized "storage means." Additionally, the computerized system comprises a host computer that stores all documents manipulated within the system. Finally, the computerized recording apparatus of the system comprises a storage means for storing the user's handwritten edits to the form. (see Column 1, Line 11 through Column 2, Line 17; see Column 9, Lines 14-38)

<i>printing the document information on a surface, wherein the surface contains a readable code contained thereon in addition to the printed document information,</i>	<p>The information recording system includes paper encoded with pixel patterns (i.e., position-coding patterns). The encoded paper is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a <u>form</u>" (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33. In order to have "forms" in a "sales book," the forms must be printed by a "printing device," and the "document information" comprising the "forms" must be "transferred" to the "printing device." (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)</p>
<i>wherein the readable code comprises a grid and a plurality of symbols,</i>	<p>The pixel patterns comprise pixels (i.e., symbols), which contain encoded position information in the form of coordinates of an X-Y grid and define a plurality of coordinate positions on the paper. (see Figures 12 and 13; see Column 6, Lines 35-44; see Column 6, Lines 61-63)</p>
<i>the value of each symbol being determined by a displacement of a marking in relation to the grid;</i>	<p>The information recording system uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. This processing includes determining Δ values as the pen moves on the encoded paper, as indicated in Column 13, Lines 20-23. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)</p>

<i>enabling an electronic pen to physically mark edit instructions on the surface and to electronically capture the edit instructions by reading the readable code proximate the marked edit instructions;</i>	The information recording system includes a pen and a recording apparatus. The pen allows the user to write on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The user's handwriting comprises "edit instructions" in that it modifies and revises the form. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)
<i>receiving through a processor associated with the memory the edit instructions captured by the electronic pen; and</i>	As previously indicated, when the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The recorded handwriting is then sent to the recording apparatus. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)
<i>altering the document information in memory to conform to the edit instructions.</i>	The information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting (i.e., document information), as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)

Claim 23:

Lazzouni discloses *the method of Claim 22,*

<i>wherein the readable code is a position-coding pattern.</i>	The information recording system includes paper encoded with pixel patterns (i.e., position-coding patterns). (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)
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Claim 31:

Lazzouni discloses *the method of Claim 22,*

<i>wherein the readable code comprises symbols associated with grid points of a grid and codes a plurality of positions on the surface,</i>	The system disclosed in Lazzouni discloses pixel patterns (i.e., readable code) comprising pixels (i.e., symbols), which contain encoded position information in the form of coordinates of an X-Y grid and define a plurality of coordinate positions on the paper. (see Figures 12 and 13; see Column 6, Lines 35-44; see Column 6, Lines 61-63)
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<i>wherein each position is coded by a plurality of the symbols, and</i>	The system in Lazzouni uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
<i>wherein each symbol contributes to the coding of more than one of the plurality of positions.</i>	The system in Lazzouni uses a plurality of pixels to determine the coordinates of the positions of the pen as it is moved over the pixel paper by the user. Thus, each pixel is used to code multiple positions of the pen. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)

Claims 32 and 33:

Lazzouni discloses the methods of Claims 1 and 16,

<i>wherein each symbol codes a value which is determined by a displacement of a marking in relation to a grid point.</i>	The information recording system uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. This processing includes determining Δ values as the pen moves on the encoded paper, as indicated in Column 13, Lines 20-23. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni, in view of Henderson, U.S. Patent No. 5,897,648.

Claim 3:

As indicated in the above rejection, Lazzouni discloses every element of Claim 1.

Lazzouni fails to expressly disclose *receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device.*

Henderson teaches:

<i>a method of editing a document comprising:</i>	The electronic document editing system taught in Henderson allows users to edit electronic documents. (see Column 1, Lines 8-11)
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<i>receiving device identity information from a reading device, the identity information associating editing information with a user of the reading device,</i>	The electronic document editing system includes multiple digitizer pens having different pen colors. The different pen colors are used to indicate edits made by different persons. (see Figures 2-3; see Column 5, Lines 6-34; see Column 7, Lines 11-26)
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for the purpose of separately identifying the edits made by various individuals (see Column 7, Lines 24-26).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *receiving device identity information from the reading device, the identity information associating the editing information with a user of the reading device,* for the purpose of separately identifying the edits made by various individuals, as taught in Henderson.

Claim 4:

As indicated in the above rejection, Lazzouni discloses every element of Claim 1.

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Lazzouni fails to expressly disclose *editing information that is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device.*

Henderson teaches:

<i>a method of editing a document comprising:</i>	The electronic document editing system taught in Henderson allows users to edit electronic documents. (see Column 1, Lines 8-11)
<i>receiving editing information that is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device,</i>	The electronic document editing system includes multiple editors working on a common document, each editor having a digitizer pen that has a different pen color. The different pen colors are used to indicate edits made by different persons. The edits made by the editors are "editing commands" in that the edits indicate changes to be made to the document. This teaching implies that each editor is capable of "generating at least one editing command." (see Figures 2-3; see Column 5, Lines 6-34; see Column 7, Lines 11-26)

for the purposes of allowing multiple editors to edit a common document and separately identifying the edits made by various individuals (see Column 7, Lines 24-26).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

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- *editing information that is associated with a plurality of users, and wherein each user generates at least one editing command with a reading device,*

for the purposes of allowing multiple editors to edit a common document and separately identifying the edits made by various individuals, as taught in Henderson.

Claim 18:

Claim 18 merely recites a computer system that performs the method of Claim 3. Both Lazzouni and Henderson operate via a computer system. Accordingly, Lazzouni, in view of Henderson, discloses/teaches every limitation of Claim 18, as indicated in the above rejection for Claim 3.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni, in view of Skinner, U.S. Patent No. 6,661,920.

Claim 13:

As indicated in the above rejection, Lazzouni discloses every element of Claim 12.

Lazzouni fails to expressly disclose that the "adding text" step includes *converting part of the editing information to machine-readable text.*

Skinner teaches:

a method, comprising: <i>converting part of the editing information to machine-readable text.</i>	Skinner teaches prior art palmtop computer systems that provide a handwriting recognition system whereby the user can write words and letters onto the user interface with a stylus pen. The system then converts the user's handwriting into a machine-readable format such as ASCII code characters. (see Column 1, Lines 54-65)
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for the purpose of allowing a user to input data into the computer device in an ASCII coded format (see Column 1, Lines 54-65).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *converting part of the editing information to machine-readable text in the "adding text" step,*

for the purpose of allowing a user to input data into the computer device in an ASCII coded format, as taught in Skinner.

Claims 2, 17, 19-21, 24-26, 29, 30, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni, in view of Dymetman et al., U.S. Patent No. 6,752,317.

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Claim 2:

Lazzouni discloses:

<i>a method of editing a document, comprising:</i>	The information recording system in Lazzouni allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory (see Column 1, Lines 6-8; see Column 2, Lines 28-31)
<i>initially registering said document in a pattern administration unit,</i>	The information recording system records different patterns of pixels for different documents. The patterns for the documents are unique in that each pattern is established by a coding algorithm that includes the following factors: number of different inks used, number of shades (or, intensity levels), number of data lines in each pixel, width of each line; dimensions of each pixel, size of the paper, and the number of pixels in an x and y directions. The system stores these different patterns when they are created. Thus, the system includes a "pattern administration unit" that "initially registers a document" in that the system creates a pattern of pixels for a document and stores that pattern of pixels. (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21)
<i>the pattern administration unit assigning a unique subset of said position-coding pattern to the pages of said registered document;</i>	The information recording system records the pattern of pixels to be used for the document in that the pixel patterns are <i>prerecorded</i> . Each page of the document will have the same pattern of pixels. (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21)

<i>transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface;</i>	The information recording system comprises printing prerecorded patterns of pixels on paper. Thus, the system "transfers the position-coding pattern," which was "assigned by the pattern administration unit," to a "printing device" that is "adapted to print the position-coding pattern on a surface." (see Figure 4; see Column 8, Lines 22-37)
<i>transferring document information to the printing device adapted to print the document information on the surface;</i>	The information recording system includes paper encoded with pixel patterns (i.e., position-coding patterns). The encoded paper is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a <i>form</i> " (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33. In order to have "forms" in a "sales book," the forms must be printed by a "printing device," and the "document information" comprising the "forms" must be "transferred" to the "printing device." (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)

<i>receiving editing information from a reading device adapted to read position information from the position-coded surface;</i>	The information recording system includes a pen and a recording apparatus. The pen allows the user to write (i.e., input editing information) on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)
<i>interpreting the editing information; and</i>	The information recording system includes the pen and the recording apparatus, wherein the recording apparatus includes components (see Figure 7) that "decode," "synthesize" and "compress" the data received from the pen, as indicated in Column 8, Line 65 through Column 9, Line 13. By performing this processing on the handwritten data, the system "interprets" the data. The data is then stored in a microprocessor. (see Figure 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13)
<i>changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document.</i>	The information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting (i.e., document information), as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)

Lazzouni fails to expressly disclose *a pattern administration unit that assigns a unique subset of said position-coding pattern to each page of said document* (emphasis added).

Dymetman teaches:

a method of manipulating a document, comprising:	The document editing system taught in Dymetman identifies actions to be taken with corresponding documents. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)
<i>a pattern administration unit that assigns a unique subset of a position-coding pattern to each page of said document,</i>	The document editing system uses dataglyphs to identify particular pages and to specify a function to be performed regarding that particular page. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)

for the purposes of specifically identifying a particular page and indicating a function to be performed regarding that particular page (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *a pattern administration unit that assigns a unique subset of said position-coding pattern to each page of said document,*

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for the purpose of specifically identifying a particular page and indicating a function to be performed regarding that particular page, as taught in Dymetman.

Claim 17:

Lazzouni discloses:

<i>a system for document editing, comprising:</i>	The computerized information recording system in Lazzouni allows a user to edit a document by recording written information on encoded paper and recording the written information in computer memory (see Column 1, Lines 6-8; see Column 2, Lines 28-31)
<i>storage means for storing a document;</i>	Lazzouni discloses that many prior art devices are used to edit documents stored in a computerized "storage means." Additionally, the computerized system comprises a host computer that stores all documents manipulated within the system. Finally, the computerized recording apparatus of the system comprises a storage means for storing the user's handwritten edits to the form. (see Column 1, Line 11 through Column 2, Line 17; see Column 9, Lines 14-38)

<p><i>registration means which is arranged to initially register the document in a pattern administration unit comprising a database of a position-coding pattern,</i></p>	<p>The information recording system records different patterns of pixels for different documents. The patterns for the documents are unique in that each pattern is established by a coding algorithm that includes the following factors: number of different inks used, number of shades (or, intensity levels), number of data lines in each pixel, width of each line; dimensions of each pixel, size of the paper, and the number of pixels in an x and y directions. The system stores these different patterns in memory when they are created. Thus, the system includes a "registration means" that "initially registers a document" in a "pattern administration unit comprising a database" in that the system creates a pattern of pixels for a document and stores that pattern of pixels in memory. (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21)</p>
<p><i>the pattern administration unit being arranged to assign a unique subset of the position-coding pattern to the pages of the registered document;</i></p>	<p>The information recording system records the pattern of pixels to be used for the document in that the pixel patterns are <i>prerecorded</i>. Each page of the document will have the same pattern of pixels. (see Figures 4 and 5; see Column 6, Line 35 through Column 8, Line 21)</p>
<p><i>means for transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface;</i></p>	<p>The information recording system comprises printing prerecorded patterns of pixels on paper. Thus, the system "transfers the position-coding pattern," which was "assigned by the pattern administration unit," to a "printing device" that is "adapted to print the position-coding pattern on a surface." (see Figure 4; see Column 8, Lines 22-37)</p>

<i>means for transferring information contained in the document to the printing device, the printing device being adapted to print the information on the surface;</i>	<p>The information recording system includes paper encoded with pixel patterns (i.e., position-coding patterns). The encoded paper is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a <u>form</u>" (emphasis added), as indicated in Column 4, Lines 43-50. Also, other forms can be used with the system, as indicated in Column 14, Lines 16-33. In order to have "forms" in a "sales book," the forms must be printed by a "printing device," and the "document information" comprising the "forms" must be "transferred" to the "printing device." (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)</p>
<i>means for receiving editing information from a reading device adapted to read position information from a position-coded surface;</i>	<p>The information recording system includes a pen and a recording apparatus. The pen allows the user to write (i.e., input editing information) on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent to the recording apparatus. (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)</p>

<i>means for interpreting the editing information; and</i>	The information recording system includes the pen and the recording apparatus, wherein the recording apparatus includes components (see Figure 7) that "decode," "synthesize" and "compress" the data received from the pen, as indicated in Column 8, Line 65 through Column 9, Line 13. By performing this processing on the handwritten data, the system "interprets" the data. The data is then stored in a microprocessor. (see Figure 7; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 8, Line 65 through Column 9, Line 13)
<i>means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document.</i>	The information recording system provides both a hardcopy and a digital copy of the form and the user's handwriting (i.e., document information), as indicated in Column 14, Lines 22-33. The digital copy may then be printed by a host computer, as indicated in Column 9, Line 25-27. (see Column 9, Line 25-27; see Column 14, Lines 22-33)

Lazzouni fails to expressly disclose a *pattern administration unit that is arranged to assign a unique subset of said position-coding pattern to each page of the registered document* (emphasis added).

Dymetman teaches:

a method of manipulating a document, comprising:	The document editing system taught in Dymetman identifies actions to be taken with corresponding documents. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)
<i>a pattern administration unit that is arranged to assign a unique subset of a position-coding pattern to each page of said document,</i>	The document editing system uses dataglyphs to identify particular pages and to specify a function to be performed regarding that particular page. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)

for the purposes of specifically identifying a particular page and indicating a function to be performed regarding that particular page (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *a pattern administration unit that is arranged to assign a unique subset of said position-coding pattern to each page of said document,*

for the purpose of specifically identifying a particular page and indicating a function to be performed regarding that particular page, as taught in Dymetman.

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Claim 19:

Lazzouni, in view of Dymetman, discloses/teaches *the system of Claim 17,*

wherein said storage means and said registration means are included in a computer.

The information recording system in Lazzouni and the document editing system in Dymetman both operate via a computer system. Thus, the "storage means" and the "registration means" are included in a "computer device."

Claim 20:

Lazzouni, in view of Dymetman, discloses/teaches *the system of Claim 19,*

wherein said means for receiving editing information is included in a pattern administration unit.

The information recording system in Lazzouni includes a pen (i.e., local processing unit) and a recording apparatus (i.e., local processing unit). The pen allows the user to write (i.e., input editing information) on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent, via the pen (i.e., local processing unit), to the recording apparatus (i.e., local processing unit) and the host computer (i.e., pattern administration unit). (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)

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Claim 21:

Lazzouni, in view of Dymetman, discloses/teaches *the system of Claim 19,*

wherein said means for receiving editing information is included in a local processing unit.

The information recording system in Lazzouni includes a pen (i.e., local processing unit) and a recording apparatus (i.e., local processing unit). The pen allows the user to write (i.e., input editing information) on the encoded paper. When the user writes on the encoded paper, the components within the pen (see Figure 3) read the pixels on the encoded paper to digitally record the user's handwriting by detecting the location of the pen with respect to the pixels, as indicated in Column 5, Line 20 through Column 6, Line 45. The "pen location" data is then sent, via the pen (i.e., local processing unit), to the recording apparatus (i.e., local processing unit) and the host computer (i.e., pattern administration unit). (see Figures 1-3; see Column 2, Line 60 through Column 3, Line 8; see Column 4, Lines 15-42; see Column 5, Line 20 through Column 6, Line 45)

Claim 24:

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 2,*

<i>wherein the position-coding pattern comprises symbols associated with grid points of a grid and codes a plurality of positions on the surface,</i>	The system disclosed in Lazzouni discloses pixel patterns (i.e., position-coding pattern) comprising pixels (i.e., symbols), which contain encoded position information in the form of coordinates of an X-Y grid and define a plurality of coordinate positions on the paper. (see Figures 12 and 13; see Column 6, Lines 35-44; see Column 6, Lines 61-63)
<i>each position being coded by a plurality of the symbols,</i>	The system in Lazzouni uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
<i>wherein each symbol contributes to the coding of more than one of the plurality of positions.</i>	The system in Lazzouni uses a plurality of pixels to determine the coordinates of the positions of the pen as it is moved over the pixel paper by the user. Thus, each pixel is used to code multiple positions of the pen. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)

Claim 25:

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 2,*

<i>wherein the pattern administration unit, in the registering, receives document data indicative of the document.</i>	The information recording system in Lazzouni includes encoded paper "made as a <i>form</i> " (emphasis added), as indicated in Column 4, Lines 43-50, that is used by sales/mobile personnel to record "business transactions" in "sales books." The system also includes a pen and a recording apparatus that allows the user to write (i.e., input editing information) on the encoded paper. In order to correlate the user's edits with the form and in order to properly print an edited form, the system stores the form (i.e., document data indicative of the document) and the corresponding pixel pattern. Thus, the system comprises a "pattern administration unit" that stores the form with the corresponding pixel pattern. (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)
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Lazzouni fails to expressly disclose a *pattern administration unit that, in the registering, receives document data indicative of the document and of a number of document pages* (emphasis added).

Dymetman teaches:

a method of manipulating a document, comprising:	The document editing system taught in Dymetman identifies actions to be taken with corresponding documents. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)
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<i>a pattern administration unit that, in the registering, receives document data indicative of the document and of a number of document pages,</i>	The document editing system uses dataglyphs to identify documents and particular pages of documents. The system also uses dataglyphs to specify a function to be performed regarding that particular page. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)
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for the purpose of specifically identifying particular documents and pages within a document (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, to include:

- *a pattern administration unit that, in the registering, receives document data indicative of the document **and of a number of document pages,***

for the purpose of specifically identifying particular documents and pages within a document, as taught in Dymetman.

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Claim 26:

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 25,*

<i>wherein the document data includes the document.</i>	The information recording system in Lazzouni includes encoded paper "made as a <i>form</i> " (emphasis added), as indicated in Column 4, Lines 43-50, that is used by sales/mobile personnel to record "business transactions" in "sales books." The form includes the document in that it is the document. (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)
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Claim 29:

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 17,*

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<p><i>wherein the registration means is arranged to transfer document data indicative of the document to the pattern administration unit.</i></p>	<p>The information recording system in Lazzouni includes encoded paper "made as a form" (emphasis added), as indicated in Column 4, Lines 43-50, that is used by sales/mobile personnel to record "business transactions" in "sales books." The system also includes a pen and a recording apparatus that allows the user to write (i.e., input editing information) on the encoded paper. In order to correlate the user's edits with the form and in order to properly print an edited form, the system stores the form (i.e., document data indicative of the document) and the corresponding pixel pattern. Thus, the system comprises a "registration means" that permits entry of the form into the system and stores the form with the corresponding pixel pattern. (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)</p>
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Lazzouni fails to expressly disclose *a registration means that is arranged to transfer document data indicative of the document **and of a number of document pages** to the pattern administration unit.*

Dymetman teaches:

<p>a method of manipulating a document, comprising:</p>	<p>The document editing system taught in Dymetman identifies actions to be taken with corresponding documents. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)</p>
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<i>a registration means that is arranged to transfer document data indicative of the document and of a number of document pages to a pattern administration unit,</i>	The document editing system uses dataglyphs to identify documents and particular pages of documents. The system also uses dataglyphs to specify a function to be performed regarding that particular page. (see Figures 3-7; see Column 3, Line 25 through Column 4, Line 10)
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for the purpose of specifically identifying particular documents and pages within a document (see Column 3, Line 25 through Column 4, Line 10).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system, disclosed in Lazzouni, to include:

- *a registration means that is arranged to transfer document data indicative of the document **and of a number of document pages** to the pattern administration unit,*

for the purpose of specifically identifying particular documents and pages within a document, as taught in Dymetman.

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Claim 30:

Lazzouni, in view of Dymetman, discloses/teaches *the system of Claim 29,*

<i>wherein the document data includes the document.</i>	The information recording system in Lazzouni includes encoded paper "made as a <i>form</i> " (emphasis added), as indicated in Column 4, Lines 43-50, that is used by sales/mobile personnel to record "business transactions" in "sales books." The form includes the document in that it is the document. (see Column 4, Lines 8-14; see Column 4, Lines 43-50; see Column 14, Lines 16-33)
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Claims 34 and 35:

Lazzouni, in view of Dymetman, discloses/teaches *the method of Claim 2 and the system of Claim 17,*

<i>wherein the position-coding pattern comprises a grid and a plurality of symbols,</i>	The pixel patterns (i.e., position-coding pattern) comprise pixels (i.e., symbols), which contain encoded position information in the form of coordinates of an X-Y grid and define a plurality of coordinate positions on the paper. (see Figures 12 and 13; see Column 6, Lines 35-44; see Column 6, Lines 61-63)
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<i>the value of each symbol being determined by a displacement of a marking in relation to the grid.</i>	The information recording system uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. This processing includes determining Δ values as the pen moves on the encoded paper, as indicated in Column 13, Lines 20-23. (see Figures 9, 10, 12 and 13; see Column 11, Line 5 through Column 14, Line 15)
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Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable Lazzouni, in view of Dymetman, and further in view of Henderson.

Claim 36:

As indicated in the above discussion, Lazzouni, in view of Dymetman, discloses/teaches every element of Claim 2.

Lazzouni, in view of Dymetman, fails to expressly disclose/teach *a document that is a word-processing document.*

Henderson teaches:

<i>a method of editing a document,</i>	The electronic document editing system taught in Henderson allows users to edit electronic documents. (see Column 1, Lines 8-11)
<i>wherein the document is a word-processing document,</i>	The electronic document editing system taught in Henderson allows users to edit word-processing documents. (see Column 6, Line 57 through Column 7, Line 10)

for the purpose of allowing a user to incorporate and display annotations of the document on an electronic version of the document (see Column 3, Lines 1-4).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method, disclosed in Lazzouni, in view of Dymetman, to include:

- *a document that is a word-processing document,*

for the purpose of allowing a user to incorporate and display annotations of the document on an electronic version of the document, as taught in Henderson.

(10) Response to Argument

Appellant's arguments filed 09/05/2006 have been fully considered but they are not persuasive.

- a. The rejection fails to establish *prima facie* anticipation of Claims 1, 6-12, 15, 16, 22 and 23 based on the teaching of Lazzouni:
3. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggests all of the elements of Claim 1:
 - a) Lazzouni fails to teach or suggest “*transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern,*” as required by Claim 1:

Appellant argues that Lazzouni merely discloses that the encoded paper can be made as a form. This disclosure, Appellant argues, is insufficient to anticipate the claim limitation because Lazzouni fails to disclose or suggest how the form is generated, what the document information is, how the document information is created, if or where the document information is stored, and to where the document information is transferred. See *Brief* – Page 11, last paragraph through Page 12, first partial paragraph.

The examiner disagrees.

Lazzouni expressly discloses that the encoded paper has a prerecorded pattern of pixels (see Figures 4-6; see Column 6, Lines 35-36). Lazzouni also expressly discloses that the encoded paper can be made in multisheet pads and can be made as a form or as blank paper (see Column 4, Lines 46-48). In the discussion regarding Figure 7, Lazzouni expressly discloses that the microprocessor of the recording unit, to which the pen and the encoded form is connected, communicates with the host computer for the purpose of transferring data to the host computer (see Figure 7; see Column 9, Lines 14-27).

Based on these express disclosures in Lazzouni, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that the information recording system in Lazzouni included a computer printer (i.e., a "*printing device*") to which the form (i.e., the "*document information*") was transferred, wherein the form was printed on paper (i.e., a "*surface*") having the pixel pattern (i.e., the "*position-coding pattern*"). This transfer of the form to the printer is required in order to provide encoded forms to a user (as expressly disclosed in Lazzouni at Column 14, Lines 22-33).

Accordingly, Lazzouni discloses "*transferring document information to a printing device adapted to print the document information on a surface having a position-coding pattern,*" as recited in Claim 1.

b) Lazzouni fails to teach or suggest “changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document,” as required by Claim 1:

Appellant argues that Lazzouni fails to disclose or suggest that the “*document information*,” or the information needed to create the form, is changed thereby resulting in an updated document because Lazzouni does not provide any disclosure that is directed to storing the information used in creating the encoded form. As such, Appellant argues, there can be no teaching or suggestion that is directed to changing the document information thereby resulting in an updated document. See *Brief* – Page 12, second full paragraph.

The examiner disagrees.

The Specification of the present application expressly recites that the “*document information*” of an updated document includes both the original text and handwritten annotations made by a reviewer (see Page 25, Paragraph 086, fourth sentence).

Lazzouni expressly discloses that encoded forms of the information recording system were provided to salesmen for the purpose of recording sales transactions and that entries made by the salesmen were stored in the memory of the system (see Column 14, Lines 22-33). These handwritten entries on the encoded forms are the equivalent of the “handwritten annotations” recited in the Specification of the present invention.

Lazzouni also expressly discloses that the system provided both a written copy of the recorded sales transactions and an electronic copy of the recorded sales transactions stored in the memory of the system. The written and electronic copies of the recorded sales transactions included both the encoded form and the handwritten entries made by the salesmen (i.e., the "*document information*"). The edited encoded forms, which included the handwritten entries made by the salesmen, are the equivalent of the "*updated document*" recited in Claim 1.

Accordingly, Lazzouni discloses "*changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document,*" as recited in Claim 1.

Moreover, as admitted by Appellant in the Specification of the present invention, the prior art (i.e., Henderson – U.S. Patent No. 5,897,648) included a device for editing an electronic document by changing the document based on an interpretation of editing markings entered by a user, thereby resulting in an edited electronic document (see Specification – Page 2, Paragraph 003).

c) **Lazzouni fails to teach or suggest “the position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions on a surface,” as required by Claim 1:**

Appellant argues that, although Lazzouni discloses that the pattern of pixels may be a uniform X-Y grid, there is no teaching or suggestion that is directed to symbols associated with grid points of a grid. Appellant also remarks that Lazzouni merely discloses utilizing vectors as the pen moves to determine pen paths. Finally, Appellant remarks that there is no teaching or suggestion that is directed to symbols associated with grid points of a grid and coding a plurality of positions. See *Brief* – Page 13, last paragraph through Page 14, first partial paragraph.

The examiner disagrees.

The examiner notes that Appellant's argument that Lazzouni fails to teach or suggest “*symbols associated with grid points of a grid*,” while noting the pattern of pixels may be a uniform X-Y grid, seems contradictory in that the pixels of the pixel pattern are the “*symbols*” and the pixels are laid out on an X-Y grid, which indicates that the pixels are “*associated with grid points of a grid*.”

Lazzouni expressly discloses that the information recording system includes paper encoded with pixel patterns (i.e., “*position-coding pattern*”) which comprise pixels (i.e., “*symbols*”) that contain encoded position information in the form of coordinates of an X-Y grid (i.e., “*grid points of a grid*”) (see Figures 12 and 13; see Column 6, Lines 35-

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44; see Column 6, Lines 61-63). Thus, Lazzouni discloses a *"position-coding pattern comprising symbols associated with grid points of a grid."*

Lazzouni also expressly discloses that that the pen must move through a number of vertical and horizontal lines of a pixel before the pixel can be registered and the position of the pen calculated (see Column 12, Lines 30-34). For example, Lazzouni expressly discloses that the pen may move horizontally through several pixels, but its position on the encoded paper could not be calculated until it has also completely traversed a pixel in the vertical direction (see Column 12, Lines 30-34). Thus, Lazzouni discloses a *"position-coding pattern comprising symbols . . . coding a plurality of positions on a surface."*

To summarize, the information recording system in Lazzouni uses a plurality of the pixels to determine the coordinates of the pen as it is moved across the encoded paper by the user. That is, as the user writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user.

Accordingly, Lazzouni discloses *"the position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions on a surface,"* as recited in Claim 1.

- d) **Lazzouni fails to teach or suggest “each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions,” as recited in Claim 1:**

Appellant argues that Lazzouni provides no disclosure that is directed to “each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions” because each pixel defines only one unique coordinate position on the surface. See *Brief* – Page 14, second full paragraph through Page 15, first full paragraph.

The examiner disagrees.

Lazzouni expressly discloses that the information recording system includes pen that must move through a number of vertical and horizontal lines of a pixel before the pixel can be registered and the position of the pen calculated (see Column 12, Lines 30-34). For example, Lazzouni expressly discloses that the pen may move horizontally through several pixels, but its position on the encoded paper could not be calculated until it has also completely traversed a pixel in the vertical direction (see Column 12, Lines 30-34).

That is, depending upon the user's movement of the pen on the encoded paper, the determination of each position of the pen's movement path across the encoded paper may require a plurality of pixels. Based on this disclosure, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that, in

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many instances, the determination of each position of the encoded paper requires a plurality of pixels.

Accordingly, Lazzouni discloses “*each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions,*” as recited in Claim 1.

4. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claim 8:

Appellant argues that Lazzouni fails to disclosure “*displaying the document information of the updated document to a user*” because Lazzouni merely discloses that the coordinate data may be displayed and the coordinate data cannot reasonably be interpreted as the updated document. Appellant remarks that Claim 8 requires that the document information is changed depending on the interpretation of the editing information, thereby resulting in an updated document, and the updated document is displayed. See *Brief* – Page 16, first full paragraph.

The examiner disagrees.

Claim 8 recites: “*A method according to claim 1 or 2, further comprising displaying the document information of the updated document to a user.*” In regard to Appellant’s remark that Claim 8 requires that “the document information is changed depending on the interpretation of the editing information, thereby resulting in an

updated document,” the examiner notes that these limitations are recited in Claim 1 and Lazzouni discloses these limitations, as indicated in the above rejection for Claim 1 and the above “*Response to Arguments*.”

Lazzouni expressly discloses that encoded forms of the information recording system were provided to salesmen for the purpose of recording sales transactions and that entries made by the salesmen were stored in the memory of the system (see Column 14, Lines 22-33). Lazzouni also expressly discloses that the information recording system provides both a hardcopy of the sales transaction and a record in memory (see Column 14, Lines 27-29). Based on this disclosure, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that the system could display the edited sales transaction (i.e., the “*updated document*”) to a user.

Accordingly, Lazzouni discloses “*displaying the document information of the updated document to a user,*” as recited in Claim 8.

5. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claim 10:

Appellant argues that Lazzouni fails to disclosure “*associating, based on position information included in the editing information, each of the handwritten annotations with*

a respective portion of the document information" because the citations of Lazzouni provided by the examiner only disclose the recording unit reading pixels on the encoded surface and the path of the pen being capable of being displayed. See *Brief* – Page 16, fourth full paragraph through Page 17, first paragraph.

The examiner disagrees.

Lazzouni expressly discloses that encoded forms of the information recording system were provided to salesmen for the purpose of recording sales transactions and that entries made by the salesmen were stored in the memory of the system (see Column 14, Lines 22-33). Lazzouni also expressly discloses that, when the pen is used to write on the encoded paper, the positions of the pen tip path are determined by reading the pixel pattern on the encoded paper and these positions are stored in the information recoding system, thereby providing an electronic representation of the written record on the encoded paper (see Column 3, Lines 26-33).

Based on this disclosure, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that each handwritten entry (i.e., *"each of the handwritten annotations"*) is located (i.e., *"associating, based on position information included in the editing information"*) in the proper position on the encoded form (i.e., *"with a respective portion of the document information"*).

Accordingly, Lazzouni discloses *"associating, based on position information included in the editing information, each of the handwritten annotations with a respective portion of the document information,"* as recited in Claim 10.

6. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claims 6-7, 9, 11-12, and 15:

Appellant's arguments with regard to Claims 6, 7, 9, 11, 12 and 15 rely on the arguments presented with regard to Claim 1. See *Brief* – Page 17, third and fourth paragraphs.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 1.

7. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claim 16:

Appellant notes that the examiner relies on the rejection of Claim 1 to support the rejection of Claim 16. Appellant argues that the rejection of Claim 16 is deficient because the examiner has failed to provide any support for the rejection of the "means" as recited in Claim 16. See *Brief* – Page 19, first full paragraph.

The examiner disagrees.

The examiner acknowledges that each limitation of Claim 16 recites a "means" for performing the functions recited in the limitations. However, the present invention is a computer system that comprises various computer hardware and computer software

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components that perform the functions recited in the limitations of Claim 16. As indicated in the above rejection for Claim 16, Lazzouni discloses the equivalent computer hardware and computer software components needed to perform the functions recited in the limitations of Claim 16. These computer hardware and computer software components, and the corresponding functions performed by the computer hardware and computer software components, are set forth in the above rejection for Claim 16.

In the following discussion, the examiner will address Appellant's arguments regarding specific "*means*" components.

a) Lazzouni fails to teach or suggest "*means for storing a document*," as required by Claim 16:

Appellant notes that the examiner relies on prior art devices disclosed in Lazzouni to support the assertion that Lazzouni discloses "*means for storing a document*" and argues that such reliance is wholly improper. Appellant argues further that the examiner should have rejected the claim under 35 U.S.C. 103 to support such a combination of separate and distinct systems. See *Brief* – Page 19, second full paragraph.

The examiner disagrees.

Firstly, “[t]he use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.” *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

Secondly, Lazzouni expressly discloses many prior art devices that comprised computer systems having input devices for inputting handwritten data and text. These devices included central processing units and operating systems. See Column 1, Line 11 through Column 2, Line 17. Based on this disclosure, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that the prior art devices, and Lazzouni’s information recording system, comprised “*means for storing a document.*”

Accordingly, Lazzouni discloses “*means for storing a document,*” as recited in Claim 16.

Appellant also argues that, although Lazzouni discloses memory for added storage capability that may be required in portable applications of the information processing apparatus, there is no disclosure that is directed to “*means for storing a document.*” See *Brief* – Page 19, third full paragraph.

The examiner disagrees.

Lazzouni expressly discloses that the computerized information recording system comprises a host computer that stores all documents manipulated within the system. Finally, the computerized recording apparatus of the system comprises both an information recording apparatus that stored the user's handwritten edits to the form and a host computer that stored the user's handwritten edits to the form (see Column 9, Lines 11-12; see Column 9, Lines 25-27).

Accordingly, Lazzouni discloses "*means for storing a document*," as recited in Claim 16.

b) Lazzouni fails to teach or suggest "*means for changing the document information based on an interpretation of the editing information, thereby resulting in an updated document*," as required by Claim 16:

Appellant's argument with regard to this limitation of Claim 16 relies on the arguments presented with regard to Claim 1. See *Brief* – Page 20, first paragraph.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 1.

- c) Lazzouni fails to teach or suggest “means for transferring information from the document to a printing device capable of printing the information on a surface provided with a position-coding pattern, the position-coding pattern comprising symbols associated with grid points of a grid and coding a plurality of positions of the surface, each position being coded by a plurality of the symbols, wherein each symbol contributes to the coding of more than one of the plurality of positions,” as required by Claim 16:

Appellant’s argument with regard to these limitations of Claim 16 relies on the arguments presented with regard to Claim 1. See *Brief* – Page 20, first paragraph.

The examiner disagrees, as indicated in the above “*Response to Arguments*” for Claim 1.

8. **The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claim 22:**

a) **Lazzouni fails to teach or suggest “*storing the document information in memory,*” as required by Claim 22:**

Appellant’s arguments with regard to this limitation of Claim 22 rely on the arguments presented with regard to Claim 16. See *Brief* – Page 22, last paragraph.

The examiner disagrees, as indicated in the above “*Response to Arguments*” for Claim 16.

b) **Lazzouni fails to teach or suggest “*wherein the readable code comprises a grid and a plurality of symbols, the value of each symbol being determined by a displacement of a marking in relation to the grid,*” as required by Claim 22:**

Appellant notes the examiner’s interpretation of a portion of the limitation (i.e., “*the value of each symbol being determined by a displacement of a marking in relation to the grid*”) and then simply asserts that there is no teaching or suggestion in Lazzouni that is directed to “*the value of each symbol being determined by a displacement of a marking in relation to the grid*” with no analysis of the present invention with respect to

the examiner's interpretation. Thus, Appellant argues, the examiner is not affording patentable weight to all of the recited elements of Claim 22. See *Brief* – Page 23, first and second paragraphs.

The examiner disagrees.

In the Final Rejection dated 01/04/2006, the examiner clearly set forth his interpretation of "*the value of each symbol being determined by a displacement of a marking in relation to the grid*" (see Claim 22, Lines 6-7) as simply being the x- and y-coordinates for the "*symbols*" on the paper with respect to the "*grid*." The examiner then pointed to that portion of the Specification of the present invention that led to this interpretation (see *Specification* – Page 8, Paragraphs 0025-0027) and asked the Appellant to explain in detail how this element of the present differs from the examiner's interpretation if the examiner's interpretation was incorrect.

The examiner notes that Appellant has neither stated that the examiner's interpretation is incorrect nor provided any alternative interpretation of this limitation.

Looking at Figure 2 of the present application, it appears that the recited "*value*" is simply the distance of the pen's path from the "*symbols*" of the encoded paper as the pen is moved on the paper. That is, the pen's displacement from the nearby "*symbols*" (i.e., the "*value of each symbol*") is measured as the pen is moved on the encoded paper in order to determine the location of the pen's path with respect to the "*symbols*." This closely corresponds with the examiner's interpretation that was previously set forth.

The information recording system in Lazzouni uses a plurality of the pixels to determine the coordinates of the pen as it is moved by the user. That is, as the user

writes on the encoded paper, the pen moves over and between a plurality of pixels. These pixels are used to code the positions of the pen as it is moved by the user. This processing includes determining Δ values from the pixels as the pen moves on the encoded paper, as indicated in Column 13, Lines 20-23. Also, see Figures 9, 10, 12 and 13, and Column 11, Line 5 through Column 14, Line 15.

Accordingly, Lazzouni discloses "*the value of each symbol being determined by a displacement of a marking in relation to the grid,*" as recited in Claim 22.

c) Lazzouni fails to teach or suggest "*altering the document information in memory to conform to the edit instructions,*" as required by Claim 22:

Appellant argues that the user's handwriting cannot constitute altered document information, "as noted above with regard to claim 1." Applicant also argues that Lazzouni includes no teaching or suggestion that discloses "*altering the original form information that is printed on a surface, to conform to the edit instructions.*" See Brief – Page 24, first paragraph.

The examiner disagrees.

Contrary to Appellant's statement, the argument that the user's handwriting cannot constitute altered document information was, in no way, set forth in Appellant's arguments for Claim 1. Stated differently, Appellant is completely incorrect that this

argument was previously set forth in the above arguments for Claim 1. That is, Appellant's arguments in support of Claim 1 do not contain this argument.

In response to Appellant's argument Lazzouni fails to disclose "altering the **original form** information that is printed on a surface to conform to the edit instructions" (emphasis added), it is noted that this feature is not recited in Claim 22. Rather, Claim 22 recites "altering the **document** information in memory to conform to the edit instructions" (emphasis added) (see Line 13). Claim 22 does **not** recite that the "**original form**" information is altered; instead, Claim 22 recites that the "**document**" information is altered. That is, Claim 22 does not limit the altered "information" to the original form but rather includes **all** "document information." This language is extremely broad.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In regard to Appellant argument that the user's handwriting cannot constitute altered document information, the Specification of the present application expressly recites that the "***document information***" of an updated document includes both the original text and handwritten annotations made by a reviewer (see Page 25, Paragraph 086, fourth sentence).

Lazzouni expressly discloses that encoded forms of the information recording system were provided to salesmen for the purpose of recording sales transactions and that entries made by the salesmen were stored in the memory of the system (see Column 14, Lines 22-33). These handwritten entries on the encoded forms are the equivalent of the "handwritten annotations" recited in the Specification of the present invention.

Lazzouni also expressly discloses that the system provided both a written copy of the recorded sales transactions and an electronic copy of the recorded sales transactions stored in the memory of the system. The written and electronic copies of the recorded sales transactions included both the encoded form and the handwritten entries made by the salesmen (i.e., the "*document information*"). The edited encoded forms, which included the handwritten entries made by the salesmen, are the equivalent of the "*altered document information*" recited in Claim 22.

Accordingly, Lazzouni discloses "*altering the document information in memory to conform to the edit instructions,*" as recited in Claim 22.

Moreover, as admitted by Appellant in the Specification of the present invention, the prior art (i.e., Henderson – U.S. Patent No. 5,897,648) included a device for editing an electronic document by changing the document based on an interpretation of editing markings entered by a user, thereby altering the electronic document to conform to the editing markings (see Specification – Page 2, Paragraph 003).

9. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claim 23:

Appellant's argument with regard to Claim 23 relies on the arguments presented with regard to Claim 22. See *Brief* – Page 24, third and fourth paragraphs.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 22.

10. The examiner fails to establish *prima facie* anticipation by failing to provide a reference that teaches or suggest all of the elements of Claims 32-33:

Appellant's arguments with regard to Claims 32 and 33 rely on the arguments presented with regard to Claims 1 and 16, respectively. See *Brief* – Page 25, first and second paragraphs.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claims 1 and 16.

b. The examiner fails to establish *prima facie* obviousness in rejecting Claims 3-4 and 18 based on the teachings of Lazzouni and Henderson:

3. The rejection fails to establish *prima facie* obviousness of dependent Claim 3:

Appellant argues that there is no teaching or suggestion in Henderson that is directed to "*receiving device identity information from a reading device, the identity information associating editing information with a user of the reading device*" because Henderson merely teaches that participants of the teleconference may see different pen colors. Appellant argues further that, because neither Lazzouni nor Henderson discloses this limitation, the examiner has failed to establish *prima facie* obviousness. See *Brief* – Page 28, third paragraph.

The examiner disagrees.

Henderson expressly teaches that the use of different colors for edits made at different locations allows the edits made by various individuals to be separately identified (see Column 7, Lines 24-26). Henderson also expressly teaches that, for applications such as teleconferencing, operators can make edits that are identifiable with a given person (see Column 12, Lines 11-14).

Based on these teachings, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer

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systems comprising stylus pens) would conclude that the pens used in the electronic document editing system in Henderson identifies the user making each particular edit.

Accordingly, Henderson teaches "*receiving device identity information from a reading device, the identity information associating editing information with a user of the reading device,*" as recited in Claim 3.

Appellant argues that there is no motivation to combine the teachings of Henderson with the teachings of Lazzouni because Henderson fails to teach or suggest identifying an individual that made a particular edit. See *Brief* – Page 28, fourth paragraph.

The examiner disagrees.

Henderson expressly teaches that the use of different colors for edits made at different locations allows the edits made by various individuals to be separately identified (see Column 7, Lines 24-26). Henderson also expressly teaches that, for applications such as teleconferencing, operators can make edits that are identifiable with a given person (see Column 12, Lines 11-14).

Based on these teachings, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that the pens used in the electronic document editing system in Henderson identifies an individual making a particular edit.

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Accordingly, Henderson teaches “*receiving device identity information from a reading device, the identity information associating editing information with a user of the reading device,*” as recited in Claim 3.

As indicated in the above rejection for Claim 3, Henderson also provides motivation to combine its teachings with the teaching of Lazzouni in that an individual making a particular edit is identified for the purposes of allowing multiple editors to edit a common document and separately identifying a particular edit made by an individual (see Column 7, Lines 24-26; see Column 12, Lines 11-14).

Accordingly, the rejection of Claim 3 under 35 U.S.C. 103 is proper.

4. The rejection fails to establish *prima facie* obviousness of dependent Claim

4:

Appellant's argument with regard to Claim 4 relies on the arguments presented with regard to Claim 1. See *Brief* – Page 29, first and second full paragraphs.

The examiner disagrees, as indicated in the above “*Response to Arguments*” for Claim 1.

5. The rejection fails to establish *prima facie* obviousness of dependent Claim

18:

A portion of Appellant's arguments with regard to Claim 18 mirror the arguments presented with regard to Claim 3. See *Brief* – Page 30, third paragraph.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 3.

Appellant also notes that Claim 18 is alternatively dependent of Claim 17 and argues that the examiner's rejection of Claim 18 with respect to Claim 17 is wholly improper because the examiner relies on Dymetman to support the rejection of Claim 17.

The examiner disagrees.

Claim 18 recites "A system according to claim **16 or 17**" (emphasis added) (see Line 1). The examiner notes that Lazzouni discloses every limitation of Claim 16, and Henderson teaches the express limitation of Claim 18, **with respect to Claim 16**, and provides motivation to combine the teachings of Henderson with the disclosure of Lazzouni. Appellant's argument that the examiner's rejection of Claim 18 with respect to Claim 17 is wholly improper is moot because the examiner did not base the rejection of Claim 18 on its dependence of Claim 17.

Accordingly, the rejection of Claim 18, with respect to Claim 16, under 35 U.S.C. 103 is proper.

c. **The rejection fails to establish *prima facie* obviousness of dependent Claim 13 based on the teachings of Lazzouni and Skinner:**

Appellant's argument with regard to Claim 13 relies on the arguments presented with regard to Claim 1. See *Brief* – Page 31, second and third full paragraphs.

The examiner disagrees, as indicated in the above “*Response to Arguments*” for Claim 1.

d. **The examiner fails to establish *prima facie* obviousness in rejecting Claims 2, 17, 19-21, 24-26, 29-31 and 34-35 based on the teachings of Lazzouni and Dymetman:**

2. **The rejection fails to establish *prima facie* obviousness of dependent Claim 18:**

a) **Lazzouni fails to teach or suggest “*initially registering said document in a pattern administration unit,*” as required by Claim 2:**

Appellant argues that Lazzouni fails to teach or suggest “*initially registering said document in a pattern administration unit*” because there is no disclosure in Lazzouni that is directed to the pattern being stored anywhere. Rather, Appellant argues,

Lazzouni merely discloses storing the position information obtained by the pen as the pen is being moved by a user. Appellant argues further that the examiner fails to identify any portion of Lazzouni that teaches a pattern administration unit. See *Brief* – Page 34, first full paragraph.

The examiner disagrees.

Lazzouni expressly discloses that the encoded paper of the information recording system includes ***prerecorded*** patterns of pixels that contain encoded position information (emphasis added) (see Column 6, Lines 35-37). Lazzouni expressly discloses that the pixels of the pixel patterns are printed onto the paper according to coding algorithms (see Figures 4 and 5A-D; see Column 6, Line 61 through Column 7, Line 40).

Lazzouni also expressly discloses that the information recording system includes a pen having a tip and including means for making visible markings on the writing surface of the encoded paper and means for optically reading the pixels and obtaining position information when the tip is in contact with the surface of the encoded paper and visible markings are made on the encoded paper (see Column 2, Lines 44-50).

Lazzouni also expressly discloses that the encoded paper of the information recording system is used by sales/mobile personnel to record “business transactions” in “sales books” and can be “made as a ***form***” (emphasis added) (see Column 4, Lines 43-50). Finally, Lazzouni also expressly discloses that, after the user has made entries into the form, the information recording system provides both a hardcopy and a digital copy of the edited form (see Column 14, Lines 22-33).

Based on these express disclosures, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that the form (i.e., “document”) was stored (i.e., “registered”) in a database management component (i.e., “pattern administration unit”) that assigned a corresponding pixel pattern (i.e., “position-coding pattern”) to the form for the purpose of tracking and recording any entries; and the locations of those entries, entered into the form by the user.

Stated differently, the computerized information recording system in Lazzouni stores the form and the corresponding pixel pattern in order to track and record the entries and the locations of those entries, made to the form by the user.

Accordingly, Lazzouni discloses “initially registering said document in a pattern administration unit,” as recited in Claim 2.

b) Lazzouni fails to teach or suggest “the pattern administration unit assigning a unique subset of said position-coding pattern to each page of said registered document,” as required by Claim 2:

Appellant argues that Lazzouni fails to disclose “the pattern administration unit assigning a unique subset of said position-coding pattern to the pages of said registered document” because there is no disclosure in Lazzouni that is directed to any “pattern

administration unit.” See *Brief* – Page 34, last paragraph through Page 35, first partial paragraph.

The examiner disagrees.

Regarding Appellant’s argument that there is no disclosure in Lazzouni that is directed to any “*pattern administration unit*,” the examiner has already demonstrated that Lazzouni discloses a “*pattern administration unit*,” as indicated in the “*Response to Arguments*” section that is directly above this section.

c) **Lazzouni fails to teach or suggest “*transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface*,” as required by Claim 2:**

Appellant argues that Lazzouni fails to teach or suggest printing patterns of pixels on paper. Appellant further argues that Lazzouni is silent on the pattern administration unit assigning the unique subset of the position-coding pattern. As such, Appellant argues, there can be no teaching of transferring such an assigned subset to a printing device. See *Brief* – Page 35, first full paragraph.

The examiner disagrees.

Lazzouni expressly discloses that the encoded paper of the information recording system includes prerecorded patterns of pixels that contain encoded position

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information (emphasis added) (see Column 6, Lines 35-37). Lazzouni also expressly discloses that the pixels of the pixel patterns are printed onto the paper according to coding algorithms (see Figures 4 and 5A-D; see Column 6, Line 61 through Column 7, Line 40).

Accordingly, Lazzouni discloses printing patterns of pixels on paper.

In regard to Appellant's argument that Lazzouni is silent on the pattern administration unit assigning the unique subset of the position-coding pattern, Lazzouni expressly discloses that the uniqueness of the pixels in the pixel patterns are established by coding algorithms (see Column 6, Lines 63-65).

Accordingly, Lazzouni discloses transferring an assigned subset to a printing device.

Thus, Lazzouni discloses "*transferring information indicative of the unique subset of the position-coding pattern, assigned by the pattern administration unit, to a printing device adapted to print the position-coding pattern on a surface,*" as recited in Claim 2

- d) Lazzouni fails to teach or suggest “*changing the document information depending on an interpretation of the editing information, thereby resulting in an updated document.*” as required by Claim 2:

Appellant's argument with regard to Claim 2 relies on the arguments presented with regard to Claim 1. See *Brief* – Page 35, second and third full paragraphs.

The examiner disagrees, as indicated in the above “*Response to Arguments*” for Claim 1.

3. The rejection fails to establish *prima facie* obviousness of independent Claim 17:

A portion of Appellant's arguments with regard to Claim 17 relies on the arguments presented with regard to Claims 1, 2 and 16. See *Brief* – Page 36, second paragraph through Page 37, first partial paragraph.

The examiner disagrees, as indicated in the above “*Response to Arguments*” for Claims 1, 2 and 16.

Appellant notes that the examiner relies on the rejection of Claim 2 to support the rejection of Claim 17. Appellant argues that the rejection of Claim 17 is deficient

because the examiner has failed to provide any support for the rejection of the “means” as recited in Claim 17. See *Brief* – Page 37, first full paragraph.

The examiner disagrees.

The examiner acknowledges that each limitation of Claim 17 recites a “means” for performing the functions recited in the limitations. However, the present invention is a computer system that comprises various computer hardware and computer software components that perform the functions recited in the limitations of Claim 17. As indicated in the above rejection for Claim 17, Lazzouni discloses the equivalent computer hardware and computer software components needed to perform the functions recited in the limitations of Claim 17. These computer hardware and computer software components, and the corresponding functions performed by the computer hardware and computer software components, are set forth in the above rejection for Claim 17.

Appellant notes that the “*pattern administration unit*” of Claim 17 comprises a “**database of position-coding pattern**” (emphasis added) and argues that the examiner has failed to consider and/or attribute any patentable weight to this claim element. See *Brief* – Page 37, second full paragraph.

The examiner disagrees.

Initially, the examiner notes that the recited “*database*” is not mentioned even once in the “**Description of the Invention**” portion of the original Specification (see Specification – Pages 2-29).

Lazzouni expressly discloses that the encoded paper of the information recording system includes ***prerecorded*** patterns of pixels that contain encoded position information (emphasis added) (see Column 6, Lines 35-37). Lazzouni expressly discloses that the pixels of the pixel patterns are printed onto the paper according to coding algorithms (see Figures 4 and 5A-D; see Column 6, Line 61 through Column 7, Line 40).

Lazzouni also expressly discloses that the information recording system includes a pen having a tip and including means for making visible markings on the writing surface of the encoded paper and means for optically reading the pixels and obtaining position information when the tip is in contact with the surface of the encoded paper and visible markings are made on the encoded paper (see Column 2, Lines 44-50).

Lazzouni also expressly discloses that the encoded paper of the information recording system is used by sales/mobile personnel to record "business transactions" in "sales books" and can be "made as a ***form***" (emphasis added) (see Column 4, Lines 43-50). Finally, Lazzouni also expressly discloses that, after the user has made entries into the form, the information recording system provides both a hardcopy and a digital copy of the edited form (see Column 14, Lines 22-33).

Based on these express disclosures, one of ordinary skill in the art at the time the invention was made (e.g., a computer programmer in the field of writing code for computer systems comprising stylus pens) would conclude that the form (i.e., "document") was stored (i.e., "registered") in a database management component (i.e., "a pattern administration unit comprising a ***database***") that assigned a corresponding

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pixel pattern (i.e., "*position-coding pattern*") to the form for the purpose of tracking and recording any entries, and the locations of those entries, entered into the form by the user.

Stated differently, the computerized information recording system in Lazzouni stores the form and the corresponding pixel pattern in a database in order to track and record the entries and the locations of those entries, made to the form by the user.

Accordingly, Lazzouni discloses "*registration means which is arranged to initially register the document in a pattern administration unit comprising a database of a position-coding pattern, the pattern administration unit being arranged to assign a unique subset of the position-coding pattern to the pages of the registered document,*" as recited in Claim 17.

4. The rejection fails to establish *prima facie* obviousness of dependent Claims 19-21, 29-30 and 35:

Appellant's arguments with regard to Claims 19-21, 29-30 and 35 rely on the arguments presented with regard to Claim 17. See *Brief* – Page 37, last paragraph through Page 38, first paragraph.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 17.

5. The rejection fails to establish *prima facie* obviousness of dependent

Claims 24-26 and 34:

Appellant's arguments with regard to Claims 24-26 and 34 rely on the arguments presented with regard to Claim 2. See *Brief* – Page 38, second and third paragraphs.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 2.

6. The rejection fails to establish *prima facie* obviousness of dependent Claim

31:

Appellant's argument with regard to Claim 31 relies on the arguments presented with regard to Claim 22. See *Brief* – Page 39, first and second paragraphs.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 22.

7. The rejection fails to establish *prima facie* obviousness of dependent Claim 36 based on the teachings of Lazzouni, Dymetman and Henderson:

Appellant's argument with regard to Claim 36 relies on the arguments presented with regard to Claim 2. See *Brief* – Page 39, third and fourth paragraphs.

The examiner disagrees, as indicated in the above "*Response to Arguments*" for Claim 2.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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Conferees:



Heather Herndon



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